# Curriculum Vitæ – Shirin Golchi

May 16, 2024

\* Please see final page for a list of acronyms for funding agencies and societies \*

# A. IDENTIFICATION

Name:	Shirin Golchi
Address:	Department of Epidemiology, Biostatistics, and Occupational Health (EBOH)
	McGill University
	2001 McGill College, Room 1215
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	Canada H3A 1G1
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Website:	https://sgolchi.research.mcgill.ca

# **B. EDUCATION**

2014	Ph.D. (Statistics)
	Simon Fraser University, Vancouver BC, Canada
	Ph.D. thesis title: Bayesian Computational Methods and Applications
2009	Master of Science (Statistics)
	Allameh Tabatabaie University, Tehran, Iran
	M.Sc. thesis title: Inverse Sampling and Adaptive Cluster Sampling
2002	Bachelor of Science (Statistics)
	University of Tehran, Tehran, Iran

# **C. APPOINTMENTS**

2019 -	Assistant Professor, Department of Epidemiology, Biostatistics,
	and Occupational Health, McGill University
2017 -	Adjunct Professor, Department of Statistics and Actuarial Science,
	Simon Fraser University
2017 - 2019	Senior Statistician, MTEK Sciences
2015 - 2017	Postdoctoral Research Fellow, Unit 5 - Statistics, University of British Columbia -
	Okanagan campus
2014 - 2015	Postdoctoral Research Officer, Department of Statistics, Columbia University
2006 - 2009	Statistical Researcher, Statistical Research and Training Centre of Iran

# D. SPECIAL HONOURS, AWARDS, RECOGNITION

# **Career Awards**

2022–2026 FRQS Chercheurs-boursiers Junior 1 Statistical Methods for the Design and Analysis of Clinical Trials (\$267,401)

# Recognitions

2020 The Lawrence Joseph Award for Teaching Excellence in Epidemiology Granted by EBOSS, McGill University

# **E. TEACHING**

### 1. Graduate courses

# EBOH, McGill University

Course title	Course	In-class	Credits	Year	No.
	no.	hours			students
Advanced Generalized Linear Models	BIOS 612	52	4	2023	3
Design of Randomized Clinical Trials	<b>EPIB 635</b>	39	3	2023	12
-				2022	15
				2021	12
				2020	13
Data Analysis for Health Sciences	EPIB 621	52	4	2023	70
				2022	80
				2021	70
				2020	71
Substantive Epidemiology (Clinical Trials)	EPIB 642	13	1	2019	2

# 2. Short Courses and Tutorials

			In-class	No.
Year	Course Title	Location	hours	Students
2021	Bayesian Adaptive Clinical Trials	McGill Summer School in Health Data Analytics	2	$\sim 20$
2022	Introduction to Bayesian Statistics	McGill CDSI	2	${\sim}20$
2024	Bayesian Adaptive Designs for Clinical Trials	CANTRAIN (online)	1.5	$\sim 50$

## **3. Invited Lectures**

				No.
Year	Course Title	Lecture title	Location	hours
2024	Randomized Clinical Trials – Clinicians' perspective	Bayesian Adaptive Clinical Trials	McGill University	1
	(Instructor: Richard Menzies)			

#### 4. Research Trainees Supervised \*Indicates primary supervisor.

### Post-doctoral trainee supervision

2023 – \*Lara Maleyeff (Co-supervisor: Erica Moodie) CRM StatLab-CANSSI Postdoctoral Fellowship (\$42,000 in 2024 - declined) CANSTAT Fellowship (\$70,000 in 2024; clinician co-mentor: Marie Hudson)

## Graduate students: Doctoral degree supervision

### Sole supervision

2022 -	Xianglin Zhao, PhD Biostatistics
	SSC Case Studies Award (\$750, shared)
	FRQNT doctoral training award (\$25,000/year, 3 years + 4 months)

2023 - Nam-Anh Tran, PhD Biostatistics

# Co-supervision

2020 -	*James Joseph Willard, PhD Biostatistics (Co-supervisor: Erica Moodie)
	FRQNT doctoral training award ( $$21,000$ /year, three years + 4 months)
	2022 SSC Best Oral Presentation Award
	McGill Faculty of Medicine doctoral fellowship (\$12,000), declined
	2023 JSM Section on Bayesian Statistical Science (SBSS) student paper competition award
	GREAT Award (\$1000 in 2023)
	2024 ASA Biopharmaceutical Section Student Paper Competition Honorable Mention (\$500)
2020 -	Junwei Shen, PhD Biostatistics (Co-supervisor: Erica Moodie)
	MITACS Accelerate Internship (August-December, 2020)
	SSC Case Studies Award (\$750, shared)
	FRQNT doctoral training award ( $$25,000$ /year, 1 year + 4 months)

2022 – Mariana Carmona Baez, PhD Biostatistics (Co-Supervisor: Alexandra Schmidt)

## Graduate students: Master's degree supervision

2021 - 2022	*Lily Chafetz, MSc (NT) Biostatistics (Co-supervisor: Alexandra Schmidt)
2021 - 2023	*Tasneem Fatima Alam, MSc (NT) Biostatistics (Co-supervisor: Alexandra Schmidt)

2023 -	*Yuki Zhang, MSc (T) Biostatistics (Co-supervisor: Haolun Shi (SFU))
2023 -	*Maureen Churipuy, CANSTAT Fellow (Co-supervisor: Marie Hudson)

### Thesis committee member

2021 -	Paritosh Kumar Roy, PhD Biostatistics (Supervisor: Alexandra Schmidt)
2021 - 2022	Jingyan Fu, MSc Biostatistics (Co-Supervisors: Sahir Bhatnagar, James Brophy)
2022 -	Margaret Logel, MSc Epidemiology (Supervisor: Eduardo Franco)
2023 -	Nora Morrison, MSc Epidemiology (Supervisors: Rebecca Fuhrer, Srividya Iyer)
2024 -	Sebastien Garneau, PhD Biostatistics (Supervisor: Alexandra Schmidt)

# 5. Mentoring activities

2023 -	CANSTAT biostatistician mentor
2023 - 2024	Telemachus Scholars (peer mentorship) Program

# F. Other Contributions

### 1. Journals

## Journal Editorship

2024 (July) – Associate Editor, Biometrics

### Reviewer of Journal Articles (5-7 papers per year)

American Journal of Epidemiology, Biometrics, Biometrical Journal, Canadian Journal of Statistics, Computational Statistics and Data Analysis, Data Base, Journal of the American Statistical Association, Statistical methods in Medical Research, Statistics in Medicine, Technometrics, SIAM/ASA Journal of Uncertainty Quantification, Statistica Sinica, Nature Communications, Pharmacoepidemiology and Drug Safety, Philosophical Transactions A, Preventive Medicine Reports, The American Statistician, Stat

# 2. Grant Reviews

### **Reviewer for Granting Agencies**

2024	New Zealand Health Research Council
2021 - 2022	NSERC Discovery Grant
2020	CIHR, COVID-19 May 2020 Rapid Research Funding Opportunity
2018	Medical Research Council (United Kingdom)
2015	US Army Research

# **Reviewer for Fellowships and Award**

2022 - 2023	CRM CANSSI-StatLab Postdoctoral Fellowship
2022	National Killam Program
2023	FMHS Studentship competition
2023	Pragmatic Trials Training Program Awards
2023 - 2024	CANSTAT Fellowship

# **3.** Examination committees

# Comprehensive exam

2021 - 2022	Member, Applied comprehensive exam (BIOS 701)
2022 -	Member, Theoretical comprehensive exam (BIOS 700)
2023 - 2024	Member, Applied comprehensive exam (BIOS 701)

# Theses and thesis protocols examination

Year	PhD thesis	PhD thesis protocol	MSc thesis
2019	0	0	0
2020	0	2	1
2021	1	0	1
2022	3	2	0
2023	2	3	0

# 4. Administrative Responsibilities and Committees

## Department of Epidemiology, Biostatistics, and Occupational Health

1 .	
2019 -	Member, Biostatistics Admissions Committee
2019 - 2020	Co-Organizer and chair, Biostatistics Seminar Series
2020 - 2022	Organizer and chair, Biostatistics Seminar Series
2020 - 2022	Judge, EBOH Research Day
2021 -	Member, Epidemiology Programs Committee
2021 - 2022	Member, Biostatistics Faculty Search Committee
2023 - 2024	Member, Biostatistics Faculty Search Committee
2023 -	EBOH Faculty Council representative (Tenure stream)
2023 - 2024	Chair, Biostatistics Admissions Committee

### McGill University

2022 – 2023 External member, Mathematics and Statistics Faculty Search Committee

# Other

2020 - 2023	Member, AID-ME Trial (led by Aifred Health) Steering Committee
2022 -	Member, CANSTAT Executive Committee
2022 -	Chair, CANSTAT Admissions Committee
2023 -	Memebr, CanTreatCOVID Trial DSMB

### Organization of conferences and sessions

#### Conferences and events

- 2022 co-chair, local organization committee, BAYSM, Montreal, Canada
- 2024 Member, organizing committee, International Women in Mathematics Day CRM event, Montreal
- 2024 Member, scientific committee, Adaptive Platform Trials Workshop, Toronto

### *Invited sessions at conferences*

- 2022 Organizer, ISBA, Montreal, Canada
- 2023 Organizer, SSC, Ottawa, Canada
- 2023 Organizer and chair, ENAR, Nashville TN, USA
- 2024 Organizer, ISBA, Venice, Italy (upcoming)
- 2024 Organizer, IBC Atlanta Georgia, USA (upcoming)

### 5. Professional Associations

- 2012 SSC
- 2012 ASA
- 2020 CRM/StatLab
- 2021 ISBA
- 2022 IBS (ENAR)
- 2023 ISCB

# G. RESEARCH

# **1. Research Activities**

My primary research interest lies at the interface of Bayesian modelling/computation and clinical trials with a specific focus on Bayesian adaptive clinical trial designs. My current research program comprises the following components: (a) development of automated design optimization procedures for efficient exploration of a wide range of assumption and trial design parameters at the planning stage; (b) Innovative design and analysis of clinical trials to address challenging research questions; (c) Analysis techniques for utilizing external data and expert knowledge.

# 2. Grants Obtained

# As Principal Investigator (PI) or co-PI: Title, total (years). \* Indicates sole investigator/applicant.

- FRQNT-NSERC NOVA for Emerging Researchers, Statistical methods for design and analysis of precision clinical trials, Co-Investigators: Erica Moodie, Alexandra Schmidt, and Anna Heath, \$244,889 (2024 – 2027).
- 2. CIHR Training Grant: Clinical Trials Training Platforms, Canadian Network for Statistical Training in Trials (CANSTAT), NPI: Sameer Parpia, \$2,542,143 (2023–2026).
- 3. Diabetes Canada End Diabetes Awards, Application ID: OG-3-23-5723-KD, co-PI; NPI: Kaberi Dasgupta, \$300,000 (2024–2027).
- 4. CANSSI Collaborative Research Teams Grant, Statistical Design of Bayesian Adaptive Clinical Trials, Co-Lead Investigators: Anna Heath and Haolun Shi, \$210,000 (2023–2026).
- 5. \*FRQS Établissement de jeunes chercheurs, Statistical Methods for the Design and Analysis of Clinical Trials, \$80,000 (Operating funds, 2022–2026)
- 6. \*NSERC Discovery Grant, Modern Techniques in Design and Analysis of Bayesian Adaptive Clinical Trials, \$115,000 (2020–2025)
- 7. \*NSERC Discovery Launch Supplement, Early Career Researcher, \$12,500 (2020).

## As Co-Investigator: Title, PI, total, my share if applicable (years)

- 1. CIHR Operating Grant: Clinical Trials Projects : Finding the right balance: An adaptive trial to identify the safest regimen with the shortest duration for TB prevention (treatment of TB Infection), NPI: Richard Menzies, \$5,772,119 (2024-2026).
- 2. CIHR Project Grant. Randomized Double-Blind Placebo-Controlled Clinical Trial to Assess the Efficacy of Mycophenolate Mofetil in Subclinical Interstitial Lung Disease Associated with Systemic Sclerosis: a Feasibility Study. Sabrina Anh-Tu Hoa, \$346,640 (2022–2025).

- 3. MITACS Accelerate. New designs for Bayesian adaptive cluster randomized trials for an individualized clinical support tool with capacity to support distance follow up and treatment of depression. Internship Supervisor: Erica Moodie, \$30,000 (2020-2021).
- 4. CIHR COVID-19 Rapid Research Funding Opportunity. PRevention of COVID-19 with high dose Oral Vitamin D supplemental Therapy in Essential healthCare Teams (PROTECT). Francine M. Ducharme; Cécile L. Tremblay , \$4,224,996 (2020).
- 5. The Bill and Melinda Gates Foundation. Investment ID OPP1192472, Synbiotics for the Early Prevention of Severe Infections in Infants (SEPSiS) trial, Daniel Roth (Hospital for Sick Children, Toronto), \$15, 356,759, \$84,000 (2020-2022).

# **Other Funding**

- 1. Collaborative Research Agreement with PharmaLex Belgium, \$42,000 (2023).
- 2. Faculty of Medicine and Health Sciences Start-up fund, \$60,000 (2019-2022).

## 3. Publications (bolded authors indicate trainees under my supervision)

Position in the author list may be interpreted as follows. For statistics/biostatistics papers led by students, the student takes first authorship and I am the second or third author as the primary or co-supervisor. In substantive publications where I provide statistical consultation I am listed as a middle author. \* Indicates co-first authorship.

## Published

- M. Le, L. Khoury, Y. Lu, C. Prosty, M. Cormier, M. P. Cheng, R. Fowler, S. Murthy, J. LY Tsang, E. Rahme, <u>S. Golchi</u>, N. Dendukuri, T. C. Lee, E. Netchiporouk. (2024) COVID-19 Immunologic Antiviral therapy with Omalizumab (CIAO) – A Phase II Randomized-Controlled Clinical Trial. *Open Forum Infectious Diseases*, ofae10. https://doi.org/10.1093/ofid/ofae102.
- J. J. Willard, <u>S. Golchi</u>, E. E. M. Moodie. (2024) Covariate Adjustment in Bayesian Adaptive Clinical Trials. *Statistical Methods in Medical Research*. 33(3):480–497. https://doi.org/10.1177/09622802241227957
- F. M. Ducharme, C. L. Tremblay, <u>S. Golchi</u>, B. Hosseini, C. Longo, J. H. White, D. Coviello, C. Quach, L. Ste-Marie, R. W. Platt. (2023) Prevention of COVID-19 with Oral Vitamin D Supplemental Therapy in Essential Healthcare Teams (PROTECT trial): protocol for a multicentre randomized placebo-controlled, triple-blind trial. *BMJ Open*, 13(5). doi: 10.1136/bmjopen-2022-064058
- B. Hosseini, C. L. Tremblay, C. Longo, <u>S. Golchi</u>, J. H. White, D. Coviello, C. Quach, L. Ste-Marie, R. W. Platt, F. M. Ducharme. (2022) Oral vitamin D supplemental therapy to attain a desired serum 25-hydroxyvitamin D concentration in essential healthcare teams. *Trials*, 23(1):1019.

https://doi.org/10.1186/s13063-022-06944-z

5. J. Shen, <u>S. Golchi</u>, E. E. M. Moodie, D. Benrimoh. (2022) New Designs for Bayesian Adaptive Cluster-Randomized Trials. *Stat.* 11(1), e487.

https://doi.org/10.1002/sta4.487

 S. Golchi, J. J. Willard, E. Pullenayegum, D. G. Bassani, L. G. Pell, K. Thorlund, and D. E. Roth. (2022) A Bayesian Adaptive Design for Clinical Trials of Rare Efficacy Outcomes with Multiple Definitions. *Clinical Trials*. 19(6), 613–622.

https://doi: 10.1177/17407745221118366

- 7. <u>S. Golchi</u>. (2022) Estimating the Design Operating Characteristics in Bayesian Adaptive Clinical Trials. *Canadian Journal of Statistics*. 50(2), 417–436.
- S. Golchi, J. Fu, X. Liu, E. Yu, R. Forghani, S. Bhatnagar. (2021) Sparse Bayesian Predictive Modelling of Tumor Response Using Radiomic Feature. *Stat.* 11(1), e450. https://doi.org/10.1002/sta4.450.
- M. Miocevic, <u>S. Golchi</u>. (2021) Bayesian mediation analysis with power prior distributions. *Multivariate Behavioral Research*. 57(6), 978–993.

https://doi: 10.1080/00273171.2021.1935202.

- S. Golchi, K. Thorlund. (2020) Sequential Monte Carlo for Response Adaptive Randomized Trials. *Biostatistics*. Vol. 21, No. 2, pp. 287–301. https://doi.org/10.1093/biostatistics/kxy048.
- L. Dron\*, <u>S. Golchi</u>\*, G. Hsu, K. Thorlund. (2019). Minimizing control group allocation in randomized trials using dynamic borrowing of external control data: an application to second line therapy for non-small cell lung cancer. *Contemporary Clinical Trials Communications*. 16:100446.

https://doi:10.1016/j.conctc.2019.100446

- K. Thorlund, <u>S. Golchi</u>, J. Haggstrom, E. Mills. (2019). Highly Efficient Clinical Trials Simulator (HECT): Software application for planning and simulating platform adaptive trials. *Gates Open Research*. 3:780. https://doi:10.12688/gatesopenres.12912.2
- S. Golchi and R. Lockhart. (2018) A Frequency-Calibrated Bayesian Search for New Particles. *Annals of Applied Statistics*. Vol. 12, No. 3, pp. 1939–1968. https://doi.org/10.1214/18-AOAS1138.
- S. Golchi. (2018) Informative Priors in Bayesian Inference and Computation. Statistical Analysis and Data Mining: The ASA Data Science Journal. https://doi.org/10.1002/sam.11371.
- E. Mills, A. Adhvaryu, P. Jakiela, J. Birungi, S. Okoboi, T. N. W. Chimulwa, J. Wanganisi, T. Achilla, E. Popoff, <u>S. Golchi</u>, D. Karlan. (2018) Unconditional cash transfers for clinical and economic outcomes among HIV-affected Ugandan households. *Aids*. Vol. 32, No. 14, pp. 2023–2031.
- 16. K. Thorlund, <u>S. Golchi</u>, E. Mills. (2017) Bayesian Adaptive Clinical Trials of Combination Treatments. *Contemporary Clinical Trials Communications*. 8, pp. 227-233.
- 17. <u>S. Golchi</u> (2016). Informative Priors and Bayesian Computation. *In The Proceedings of IEEE Data Science and Advanced Analysis 2016.*
- 18. <u>S. Golchi</u> and D.A. Campbell (2016). Sequentially Constrained Monte Carlo. *Computational Statistics and Data Analysis*. Vol. 97, pp. 98–113.

19. <u>S. Golchi</u>, D. Bingham, H. Chipman, and D.A. Campbell (2015). Monotone Emulation of Computer Experiments. *SIAM/ASA Journal of Uncertainty Quantification*. Vol. 3, No 1, pp. 370-392.

#### Submitted/under revision

- 1. L. Maleyeff, <u>S. Golchi</u>, E. E. M. Moodie, M. Hudson. An adaptive enrichment design using Bayesian model averaging for selection and threshold-identification of tailoring variables. *Biometrics*. Submitted May 13, 2024.
- 2. M. Carmona-Baez, A. M. Schmidt, <u>S. Golchi</u>, D. Buckeridge. A joint temporal model for hospitalizations and ICU admissions due to COVID-19 in Quebec. *Stat.* Submitted May 2, 2024.
- J. J. Willard, <u>S. Golchi</u>, E. E. M. Moodie. Bayesian Optimization for Identification of Optimal Biological Dose Combinations in Personalized Dose-Finding Trials. *Statistics in Biopharmaceutical Research*. Submitted Apr 21, 2024. https://arxiv.org/abs/2404.11323
- 4. C. Prosty, M. Le, Y. Lu, L. Khoury, M. Cormier, M. Cheng, R. Fowler, S. Murthy, J. Tsang, D. Lejtenyi, M. Ben-Shoshan, E. Rahme, S. Golchi, N. Dendukuri, T. Lee, E. Netchiporouk. Effect of Omalizumab on Inflammatory Markers in COVID-19: An Exploratory Analysis of the COVID-19 Immunologic Antiviral therapy with Omalizumab (CIAO) Trial. *Open Forum Infectious Diseases*. Submitted Apr 19, 2024.
- 5. L. Chafetz, <u>S. Golchi</u>, Alexandra Schmidt. Strategies for scheduling of interim analyses in Bayesian adaptive clinical trials. *Clinical Trials*. Submitted Feb 13, 2024.
- J. J. Willard, S. Golchi, E. E. M. Moodie, B. Boulanger, B. P. Carlin. Bayesian Optimization for Personalized Dose-Finding Trials with Combination Therapies. *Journal of the Royal Statistical Society, Series C*. Submitted Feb 19, 2024. https://arxiv.org/abs/2310.17334
- 7. J. Shen, E. E. M. Moodie, <u>S. Golchi</u>. Keeping individual records confidential using a sparse two-stage Bayesian meta-analysis for individualized treatments. *Biostatistics*. Submitted Jan 11, 2024.
- 8. <u>S. Golchi</u> and **J. J. Willard**. Estimating the Sampling Distribution of Posterior Decision Summaries in Bayesian Clinical Trials. *Biometrical Journal*. Revisions submitted Apr 27, 2024. https://arxiv.org/abs/2306.09151

## 4. Presentations

#### **Invited Conference Presentations**

- 1. (Upcoming) Bayesian Design Operating Characteristics in Clinical Trials, *IBC*, Atlanta, Georgia USA, December 2024.
- 2. (Upcoming) Statistical Design of Bayesian Adaptive Trial Designs, *Greek Stochastics*, Folegandros, Greece, July 2024.
- 3. (Upcoming) Bayesian Design Operating Characteristics in Clinical Trials, *ISBA World Meeting*, Venice, Italy, July 2024.

- 4. (Upcoming) Estimating Probabilities of Errors; from Particle Physics to Clinical Trials, *Statistical Learning for Large Scale Data*, Simon Fraser University, Vancouver, June 2024.
- 5. (Upcoming) Bayesian Model Averaging for Selection and Threshold-Identification of Tailoring Variables, *The 37th New England Statistics Symposium*, University of Connecticut, May 2024.
- 6. Estimating the Sampling Distribution of Test-Statistics in Bayesian Clinical Trials, *SSC Annual Meeting*, Ottawa, May 2023.
- 7. Current Approaches for Accelerating Drug Approvals in Rare Disease (Discussion), *ENAR Spring Meeting*, Nashville TN, March 2023.
- 8. Computationally Efficient Assessment of Design Operating Characteristics in Bayesian Adaptive Trials. *JSM*, Washington DC, August 2022.
- 9. Estimating Design Operating Characteristics in Clinical Trials. ISBA World Meeting, Montreal, June 2022.
- 10. Use of Historical Individual Patient Data in Analysis of Clinical Trials. *The 34th New England Statistics Symposium*, October 2021.
- 11. Assessment of Design Operating Characteristics for Bayesian Adaptive Trials. 6th Canadian Conference in Applied Statistics, July 2021.
- 12. Assessment of Design Operating Characteristics for Bayesian Adaptive Trials. SSC meeting, June 2021.
- 13. Sparse Bayesian Predictive Modeling of Tumor Response from Radiomic Data. 2021 Symposium on Data Science and Statistics, June 2021.
- 14. Individually weighted power priors for data synthesis. ENAR Spring Meeting, March 2021.
- 15. Informative Priors based on Individual Patient Data for Analysis of Clinical Trials. *ICSA-Canada Chapter* 2019 Symposium, Kingston, ON, Canada, 2019.
- 16. Designs of constrained computer experiments. Conference on Frontiers of Big Data and Statistical Sciences; ICSA Canada Chapter, Vancouver, 2017.
- 17. Informative priors and Bayesian computation. *3rd IEEE International Conference on Data Science and Advanced Analytics*, Montreal, October 2016.
- 18. Space-filling designs for constrained regions. *International conference on design of experiments ICODOE*, University of Memphis, 2016.
- 19. Sequentially Constrained Monte Carlo. Association for Women in Mathematics Research Symposium, University of Maryland, 2015.

#### Invited Presentations at Universities or Research Institute

- 1. Bayesian Design Operating Characteristics in Clinical Trials, University of Minnesota Division of Biostatistics & Health Data Science seminar series, Minneapolis, March 2024.
- 2. An Introduction to Bayesian Inference. Joint CIRS/SWB webinar series, July 2022.
- 3. An Introduction to Bayesian adaptive methods in clinical trials (Webinar). PharmaLex, June 2022.
- 4. Statistical Design of Bayesian Adaptive Trials. University of Sherbrooke, May 2022.
- 5. Assessment of Design Operating Characteristics for Bayesian Adaptive Trials. McGill University Health Centre Glen site, April 2021.

- 6. Design and Analysis of Modern Clinical Trials. Jewish General Hospital, Epidemiology Seminar Series, September 2020.
- 7. Design and Analysis of Modern Clinical Trials. Département de mathématiques, Université du Québec à Montréal, March 2020.
- 8. Computational Techniques for Bayesian Adaptive Randomized Trials. Department of Epidemiology, Biostatistics and Occupational Health, McGill University, November 2018.
- 9. Constraints, priors, and Bayesian Computation. Department of Statistics and Actuarial Science Seminar, University of Waterloo, January 2017.
- 10. Sequentially Constrained Monte Carlo. Unit 5 Colloquium Talks, University of British Columbia Okanagan, 2015.
- 11. Bayesian Inference for Social Networks using Aggregated Relational Data. eScience Institute, University of Washington, 2015.
- 12. Monotone Function Estimation for Computer Experiments. University of Victoria, Department of Mathematics and Statistics Seminar Series, 2013.

#### Contributed presentations and posters

- 1. Methods for assessment of frequentist operating characteristics in Bayesian clinical trials. 44th International Conference of the ISCB, Milan, Italy, August 2023.
- 2. Assessment of Design Operating Characteristics in Bayesian Adaptive Designs for Clinical Trials. *31st International Biometric Conference*, Riga, Latvia, July 2022.
- 3. Assessment of Design Operating Characteristics for Bayesian Adaptive Trials. *ISBA World Meeting*, June/July 2021.
- 4. Sequential Monte Carlo for Response Adaptive Randomized Trials. *International Biometric Conference*, Barcelona, Spain, 2018.
- 5. Sequentially Constrained Monte Carlo. SSC Meeting, Toronto, 2014.
- 6. Monotone Emulation and Uncertainty Quantification (Poster). CoDA, Santa Fe, NM, 2014.
- 7. Monotone Computer Experiments. JSM, Montreal, 2013.
- 8. A Decision Theoretic Approach for Hypothesis Testing in Particle Physics. SSC Meeting, Edmonton, 2013.
- 9. A Parallel Tempering Algorithm to Sample from Constrained Posteriors. SFU-UBC Joint Workshop, 2012.

# ACRONYMS

ASA	American Statistical Association
BAYSM	Bayesian Yong Statisticians' Meeting
CANSTAT	The Canadian Network for Statistical Training in Trial
CANTRAIN	CANadian Consortium of Clinical Trial TRAINing platform
CDSI	Computational and Data Systems Initiative
CIHR	Canadian Institutes of Health Research
CIRS	Committee on International Relations in Statistics
CoDA	Conference on Data Analysis
CRM	Centre de recherches mathématiques
ENAR	Eastern North American Region of the IBS
FMHS	Faculty of Medicine and Health Sciences
IBS	International Biometrics Society
IBC	International Biometrics Conference
ICSA	International Chinese Statistical Association
ICODOE	International Conference on Design of Experiments
ISBA	International Society for Bayesian Analysis
ISCB	International Society for Clinical Biostatistics
JSM	Joint Statistical Meetings
MITACS	Mathematics of Information Technology and Complex Systems
NSERC	Natural Sciences and Engineering Research Council
SIAM	Society for Industrial and Applied Mathematics
SWB	Statistics without Borders